Marlene Dortch, Secretary

Federal Communications Commission

445 12th Street SW

Washington, DC 20554

Re: ***The Commission Begins the Process for Authorizing 6 GHz Band Automated Frequency Coordination Systems Public Notice – ET Docket No. 21-352***

Dear Ms. Dortch,

Wireless Broadband Alliance Ltd. (WBA) strongly applauds and supports Commission's work to make the use 6 GHz band for unlicensed devices a reality. Founded in 2003, the Wireless Broadband Alliance's (WBA) vision is to drive seamless, interoperable service experiences via Wi-Fi within the global wireless ecosystem. WBA's mission is to enable collaboration between service providers, technology companies and organizations to achieve that vision. WBA undertakes programs and activities to address business and technical issues, as well as opportunities, for member companies. Building on our heritage of Next Generation Hotspot and Carrier Wi-Fi and through recent initiatives like OpenRoaming, WBA is driving the adoption of Next Generation Wi-Fi services across the entire public Wi-Fi ecosystem, including IoT, Big Data, Converged Services, Smart Cities and 5G. WBA's membership is comprised of major operators and leading technology companies.

Attached is an application by the WBA to operate an Automated Frequency Coordination (AFC) System pursuant to Part 15 of the Commission's rules. In this AFC application, WBA leverages the technical advances in Wi-Fi related with OpenRoaming solution that was launched by WBA and provide the building blocks to augment the availability and accessibility of Wi-Fi networks locally and globally. We are pleased to be a part of this important new innovation in Wi-Fi in the 6 GHz band and view the AFC as key to both expanding Wi-Fi use cases while protecting band incumbents from harmful interference.

Should you have any questions or require more information, please do not hesitate to contact the WBA.

Sincerely,

Tiago Rodrigues

CEO - **Wireless Broadband Alliance Ltd. CO.**

Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

In the Matter of	)	
	)	
Authorizing 6 GHz Band Automated Frequency Coordination Systems	)	ET Docket No. 21-352
	)	

Wireless Broadband Alliance Ltd. Application to become an Automated Frequency Coordination (AFC) system operator

November 30, 2021

On September 28, 2021, the Commission published a Public Notice of its intent to accept applications for Automated Frequency Coordination systems that would be utilized by "Standard Power" devices operating in the unlicensed 6 GHz band to avoid interference to incumbent radio systems.[1] The Public Notice stated that applications would be accepted beginning on November 30, 2021, and that any application received on or before that date would be publicly listed for comment, with comments due December 21, 2021. AFC systems will provide Standard Power registered devices both available frequencies and associated maximum transmit power levels for unlicensed operations in the U-NII-5 and U-NII-7 bands. In its Report and Order opening the 6 GHz band to unlicensed use, the Commission specified a series of rules that identify AFC regulatory requirements that inform AFC System operators of key elements of AFC calculations, and that also require geolocation capability from associated devices.[2] The WBA's proposed AFC System will comply with the requirements and core functions described in Section 15.407(k) of the Commission's rules and the 6 GHz Report and Order. In its application, below, the WBA provides its answers to the application questions as listed in the September 28 Public Notice.

1. ***AFC system operator contact information, including name, phone number and email address that Commission staff may use for all AFC system related inquiries, such as information and data requests or to provide enforcement instructions.***

Response – For the purposes of the application, the Commission should contact Bruno Tomas, Director of Technical Programs and Project Management Office (PMO), at bruno@wballiance.com or +351 918 422 474. As the WBA application moves through the approval process and becomes commercially operational, WBA expects to assign a different point of contact, which we will promptly

---

[1] Public Notice, "The Commission Begins the Process for Authorizing 6 GHz Band Automated Frequency Coordination Systems," ET Docket No. 21- 352, released September 28, 2021.

[2] *Unlicensed Use of the 6 GHz Band*, ET Docket No. 18-295, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 3852 (2020) (*6 GHz Report and Order*). AFC rules are specified in 47 C.F.R. Section 15.407.

provide to the Commission.

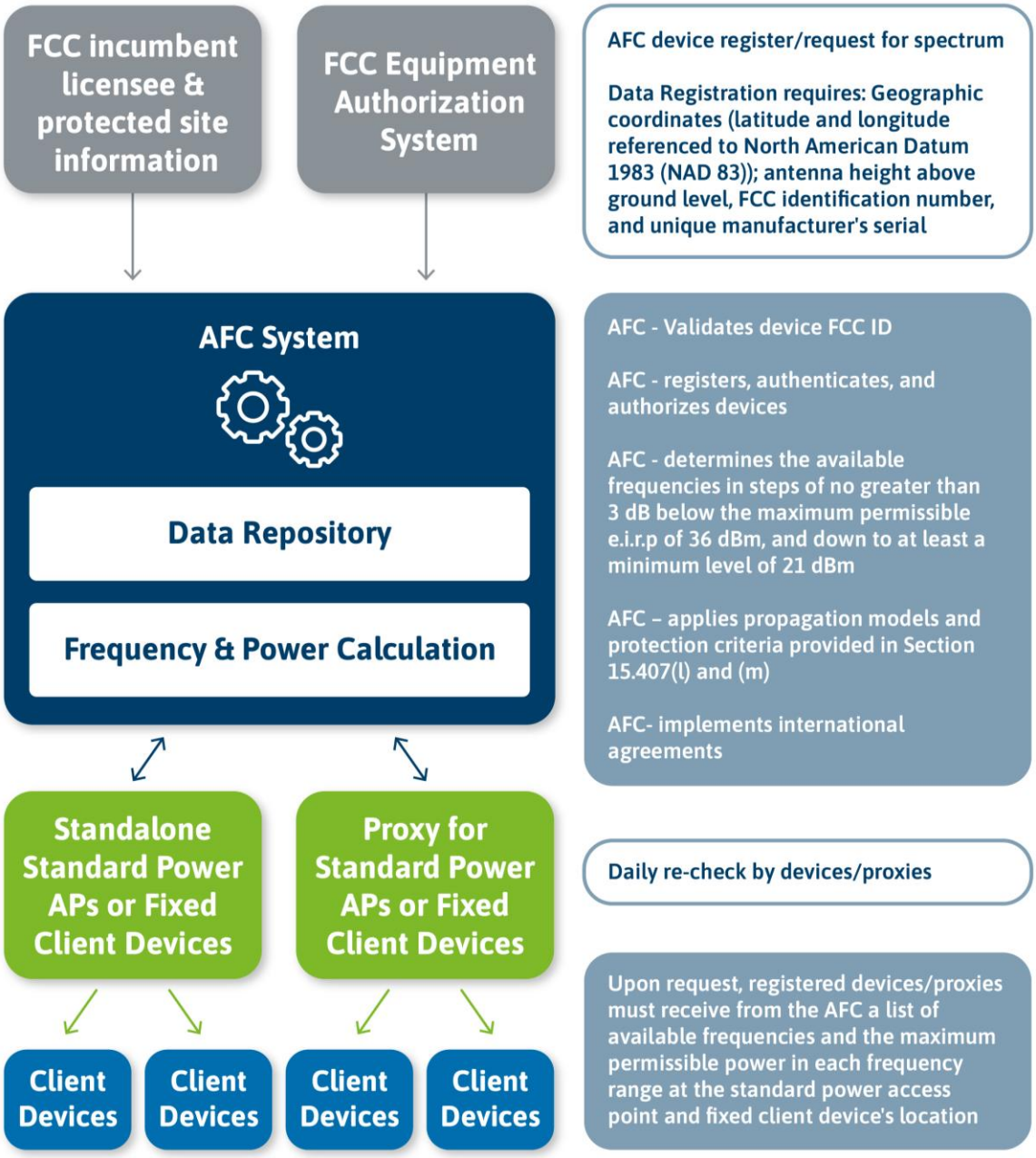
For purposes of enforcement instructions, WBA Board has voted to incorporate within the United States as a not-for-profit corporation, with an expected completion date of end of calendar 2022. The WBA is currently a registered entity in Singapore. In becoming a US-based entity, WBA will establish a US presence, including a contact for receiving any legal notices such as enforcement directions. As that process moves forward, WBA will promptly amend its application.[3]

[Remainder of page intentionally left blank]

[3] WBA is composed of a wide range of industry members. One of our members is currently interacting with our association under a set of special arrangements that effectively keep the entity at arm's length from policy and technical standards work – Huawei. Today, Huawei is permitted to attend WBA public events only. WBA can provide further information to FCC staff if requested.

2. ***A technical diagram showing the architecture of the AFC system with a brief description of its operation.***

Response – WBA proposed AFC system follows Open AFC[4] specification available through the Telecom Infra Project[5] (TIP). The WBA proposed architecture is depicted below:



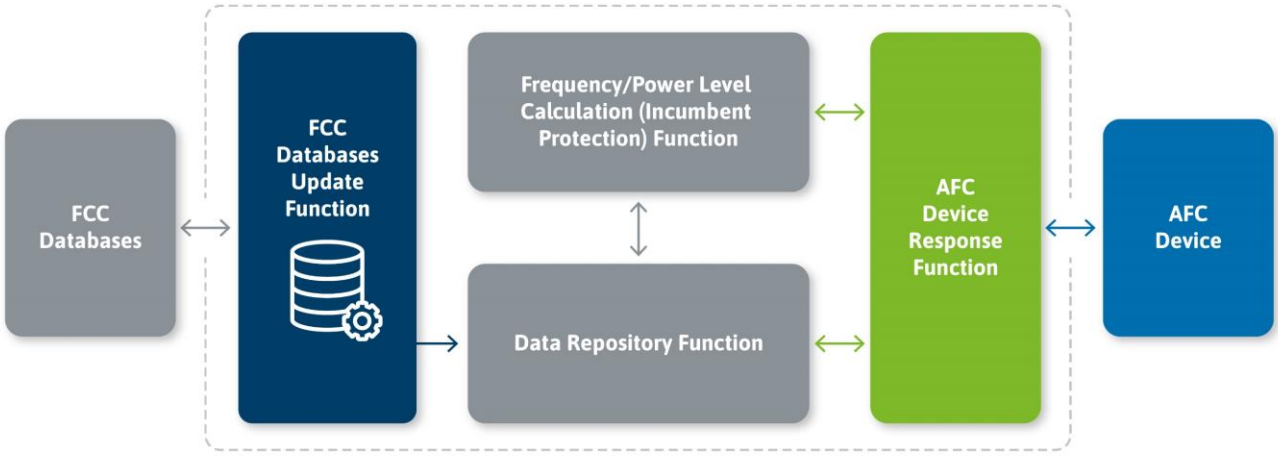
[4] TIP Open AFC goal: https://telecominfraproject.com/open-afc/

[5] TIP OpenAFC website: Open_AFC_Open_AFC_Software_Architecture_v10_FINAL_November_2021_GREEN_-_Public_Access.pdf

In the context of this proposal AFC Device is defined as either 1) Standalone Standard Power AP; or 2) Proxy to Standard Power AP; or 3) Fixed Client Device.

The Open AFC software would perform the following core AFC functions:

Functional diagram of WBA Open AFC Software Functions



The FCC Database Update Function: This function is responsible for pulling information from FCC licensee records (e.g., ULS) and the Equipment Authorization database. This function ensures that information about protected systems is current as compared to the FCC records.

The Frequency/Power Level Calculation (Incumbent Protection) Function: This function draws data about protected systems from the Data Repository Function and performs calculations pursuant to 15.407 requirements. This function then provides available frequencies and power level values to the AFC Device Response Function. Administrators shall have the capability to override calculations when pursuing a WBA or FCC request/investigation.

Data Repository Function: This function stores (a) current FCC protected licensee and site information (b) registered AFC device information including validated FCC ID data and (c) log files of frequencies and power level values provided to registered devices. This function provides data to the Frequency/Power Level Calculation Function.

AFC Device Response Function: Upon receipt of a request from a registered AFC device, this function requests a calculation of available frequencies and power level values and returns the results to the registered AFC device. This function also provides log file data to the data

repository for the request and response. This function evaluates the device request for the presence of all required data (listed on the proposed architecture of the AFC system) and validates the presence of an FCC Identification number for the device.

The architecture of the AFC System is designed to deny an AFC device access to spectrum under the following circumstances:

- The AFC device fails to provide the necessary information to register.
- The AFC cannot validate the FCC ID of the AFC device.
- AFC System frequency/power availability response after the first request: device must provide all 4 registration parameters again (re-check request). Further this should be done in a daily basis for continuous service.
- No frequencies are available at the AFC device location at any power level.

3. ***A description of whether the AFC system software is based on a proprietary implementation or open source.***

Response – WBA proposed AFC system software is based on open-source reference implementation based on Open AFC project:

- Define and contribute software requirements, design artifacts, architectures, APIs, data models, and workflows.
- Reference to existing industry standards and available components as appropriate.
- Develop, build, and test software components.
- Validate AFC services and devices interoperability and ability to protect the incumbents through direct engagement in TIP lab and field trials.
- Support a rich AFC ecosystem that is well integrated, curated, and tested.

Open AFC has established a Contributor's License Agreement and invites participation from any interested party.[6]

[6] https://cdn.brandfolder.io/D8DI15S7/as/q7rnyo-fv487k-3rctmj/Software_CLA_-_Telecom_Infra_Project.pdf

In addition to running Open AFC source code for its core functions, WBA's AFC System's Frequency Availability Calculation Function will use open-source libraries such as the Irregular Terrain Model ("ITM") and other publicly available databases.

WBA will also implement the Wi-Fi Alliance AFC System to AFC Device Interface Specification[7]. This specification defines the signaling protocols for the interface between AFC System and AFC Devices to support FCC Regulatory Requirements for 6GHz Standard Power mode (Covering Standalone AP, Proxy APs, and Fixed Client Devices). The interface is based on JSON industry-standard messaging, HTTP transport and using the TLS to support security protocols to carry messages between AFC System and AFC Devices.

WBA may supplement the open-source software components of the AFC system with proprietary or local enhancements to adapt the open-source software for WBA cloud deployment, including for example, in areas such as user interfaces, logging, audit capability, replication, database connectivity, authentication, and in other areas, or for otherwise enhancing the open-source solution.

4. ***A demonstration that the prospective AFC system operator possesses sufficient technical expertise to operate an AFC system.***

Response –

About the WBA

WBA identifies and executes on opportunities to drive seamless, interoperable service experiences via Wi-Fi within the global wireless ecosystem. WBA undertakes programs and activities to address business and technical issues, as well as opportunities, for member companies. WBA work areas include standards development, industry guidelines, trials, certification and advocacy. Its key programs include Next Generation Wi-Fi, OpenRoaming, 5G, IoT, Testing and Interoperability and Policy and Regulatory Affairs, with member-led Work Groups dedicated to resolving standards and technical issues to promote end-to-end services and accelerate business opportunities.

In these endeavors, WBA is supported by a roster of leading companies representing the most significant operator and technology players in Wi-Fi globally. From a governance perspective, our

[7] https://www.wi-fi.org/file/afc-specification-and-test-plans

Board sets WBA policy and approves WBA projects, and is composed of senior executives who collectively have hundreds of years of industry experience.

The Board members are:

Name	Role	Company
Dr. Angelos Mavridis	Senior Wi-Fi Manager	Telekom Deutschland GmbH
Dr. Anton Monk	CTO of Wireless Initiatives	Viasat
Azad Singh	Chief Global Mobility Solutions	Reliance Jio
Cole Reinwand	COO DeepBlue	Comcast
Dr. Derek Peterson	CTO	Boingo Wireless
Gabriel Desjardins	Director Wireless Connectivity	Broadcom
Dr. Jongmin Lee	SVP-CTO	SK Telecom
JR Wilson	VP Tower Strategy & Roaming	AT&T Services Inc.
Matthew MacPherson	CTO	Cisco Systems Inc.
Metin Taskin	CTO	Airties
Dr. Necati Canpolat	Senior Staff	Intel
Paul Crane	Director Converged Network R&D	BT
Raj Gajwani	Director Orion Wi-Fi	Google
Tiago Rodrigues	CEO	WBA

In addition, WBA has established a working team from its membership to focus on AFC development from a technological, operational and business case perspective. Representatives of the following companies in that group include Broadcom, Cisco Systems, Intel Corporation, and Meta. This includes individuals who have made contributions to FCC rule development, Wi-Fi Alliance and/or Winn Forum standards.

WBA experience with Open Roaming

From the perspective of substantive experience, the WBA currently manages the OpenRoaming federation connecting millions of users to hundreds of thousands of wireless networks. Enabling the full benefits of 6 GHz Wi-Fi with an AFC system will deliver all the public Wi-Fi benefits of OpenRoaming including automatic friction free onboarding for users while managing privacy and security and enabling different identity options. Functionally, this encompasses three key elements:

- **Cloud federation:** creates a federation of networks and identity providers to enable automatic roaming and user onboarding on Wi-Fi. Based on WBA's Wireless Roaming Intermediary eXchange (WRIX) standards to scale and facilitate different business models under a harmonized framework.
- **Cyber Security:** enables simple, secure and scalable Wi-Fi connections amongst different organizations that are part of WBA OpenRoaming™. Allowing automatic and secure roaming between millions of networks, nationally and globally with secured interconnection and encrypted communications.
- **Network automation:** defines an automated roaming consortium codes framework (RCOI) to support policy provision on devices and networks. Organizations that manage a Wi-Fi CERTIFIED Passpoint®-enabled network may become part of the WBA OpenRoaming™ federation.

The system covers multiple infrastructure vendors and network providers but as well device manufacturers and identity providers, acting as the federation policy authority, WBA effectively operates the root certificate authority which enables this service on behalf of the industry:

- **Public Keying Infrastructure** tiered model with ecosystem broker taking roles such as Intermediate Certificate Authorities and/or Registration Authorities each abiding to a common legal framework.
- **Cloud centralized database** with a registry of all the end-entities operating in the ecosystem, allowing automated queries and operation using APIs provided to each of the ecosystem brokers.
- **Agile standards development process** with a multitude of industry stakeholders, for maintaining, updating and evolving all the features and capabilities of the OpenRoaming systems.

Elements of these same functions also are required to establish an AFC System: system cybersecurity, device security, managing a harmonized framework to allow participation by Wi-Fi networks, authentication identify providers, data storage and maintenance. In our view, AFC System operations are a natural extension of our work with OpenRoaming.

WBA Strategic Roadmap and Priority Initiatives

WBA believes that the latest advances in Wi-Fi – including the new Wi-Fi 6 standard and opening the 6 GHz band for Wi-Fi technology – are game-changers for the global industry and will be a critical enabler for the growth and delivery of advanced wireless services to consumers,

municipalities, enterprises and carriers as well as creating more opportunities for innovation and new businesses.[8] As an organization, WBA has always thrived on helping the different stakeholders in the wireless industry come together and create the necessary foundations for users all around the globe to be able to access better and more user-friendly technology. At the end of the day, WBA has always been about the wireless services and how the technology is applied in real life.[9]

Over the last year, despite all the challenges brought by the pandemic, WBA members have put together remarkable outcomes, ranging from the topics related to roaming to the convergence between Wi-Fi and other technologies and, naturally, the continuous pursuit for a seamless and secure user experience that is crucial to guarantee market-wide adoption. As an example, the launch of OpenRoaming, paired with the Wireless Roaming Intermediary eXchange (WRIX) 3.0 standard and the WBA Unique Organization Identifier (WBAID) are important developments for the federation of Wi-Fi networks that will support roaming. The conditions are now met to scale and grow the Wi-Fi use disruptively, as more organizations join the federation of Wi-Fi networks.

The WBAID is the first industry Identifier that will be put on all ecosystem players across the world for WBA members and non-members enabling roaming traffic to be accurately identified. This model demonstrates the global and inclusive context of WBA initiatives.

Next Gen Wi-Fi Field Trials & Deployments across Verticals (Wi-Fi 6 & 6E)

The WBA also conducts technology trials to showcase new technology and provide member experience prior to commercial launches. The WBA has worked on trials in transportation hubs, education, industrial locations, residential settings and more. In doing so, WBA provides a platform for end-to-end Wi-Fi 6 & Wi-Fi 6E trials based on a comprehensive test plan to demonstrate key Wi-Fi capabilities in end-to-end real life networks and showcase the readiness for carrier Wi-Fi deployments across different geographies and various key verticals, including regulators around the world to follow FCC's lead on unlicensed 6 GHz band use.[10]

WBA maintains close cooperation with regulators globally working in partnership with its membership, as we seek to advance spectrum availability for unlicensed operations.[11]

---

[8] WBA Global Wi-Fi 6 & 6E Hub: https://wballiance.com/wi-fi-6

[9] Mettis Aerospace & WBA Worlds First Wi-Fi 6 live trial: https://www.mettisgroup.com/wifi6-phase1

[10] https://wballiance.com/wbas-first-phase-of-wi-fi-6e-trials-shows-the-massive-potential-of-wi-fi-in-the-6ghz-band

[11] WBA & CITC Wi-Fi 6E trial: https://wballiance.com/wba-celebrates-saudi-arabias-ground-breaking-designation-for-unlicensed-spectrum/

WBA also focuses on Industrial Internet of Things (IIoT) and applying the latest Wi-Fi equipment in a typically dense and heavy environment. The Work Group is developing industry guidelines for Wi-Fi 6 & Wi-Fi 6E deployment in industrial environments, IIoT and enterprise scenarios that demonstrate high-quality Wi-Fi use for high determinism enterprise applications and showcasing Wi-Fi 6/6E features on IIoT, specifically increased determinism and support for ultra-low latency applications.

As much as Wi-Fi 6 delivers KPI improvements, particularly high throughput, reduced latency, and better performance in crowded environments, the standard was conceived before the benefits of 6 GHz unlicensed spectrum could be fully leveraged, and therefore this work is consensually regarded as key for the successful commercialization of the technology. Further, the dawn of Wi-Fi 7 that is being designed from its inception to use all newly available bandwidth, with features including 320 MHz wide channels, true multi-band/multi-radio carrier aggregation and multi-AP coordination, make it natural for WBA advocating for Wi-Fi 7 over the near future.

WBA is uniquely suited to take on this role and any Wi-Fi industry services operation related topic, such as AFC operation, because it is the only organization that brings together the full connectivity ecosystem: operators, smartphone and access OEMs, and semiconductor vendors. This broad range of participants can be leveraged to match Wi-Fi 7 capabilities with end-customer requirements.

Industry Technology Reports and Guidelines

The depth of WBA's understanding of Wi-Fi is evidenced in various guidelines and technology reports that the WBA has published.[12] Among the topics that WBA has tackled in its deliverables: Coordinated Shared Spectrum (2017), Unlicensed Integration with 5G Networks (2018), Wi-Fi 6 Deployment Guidelines & Scenarios (2019), Wi-Fi OnBoarding Evolution (2020), In-Home Wi-Fi Multi-AP Guidelines & Test Plan (2021), Cellular Identity (IMSI) Privacy Protection for Wi-Fi (2021), 5G and Wi-Fi RAN Convergence (2021). These are only a few of the technical papers that the WBA has published, and testament to WBA's broad expertise around the Wi-Fi ecosystem.

WBA understands the importance of not just testing, but trialing technology in the market to gain experience with it. WBA has for decades worked on behalf of its members on complex technology issues and has a deep understanding of unlicensed technology.

[12] https://wballiance.com/resources/wba-white-papers/

5. ***A description of the prospective AFC system operator's recordkeeping policies, including registration record retention as well as retention of historical frequency availability data.***

Response – Devices requests in the US that are managed under the WBA AFC system, will be retained and consistent with Part 15, specifically 47 CFR 15.407(k)(5) and (k)(15)(i).

Storage of data on registered AFC devices: Registration data provided by the device, along with a validated FCC ID together with permissible frequencies and power levels, will be stored in secure database for active AFC devices. The data will be retained for the duration as directed by the Commission staff. Active AFC devices shall include any AFC device that has contacted the AFC within the prior three months to request frequency availability. Devices that fail daily re-check will be identified as candidates for exclusion from the Active AFC device data repository but will not be excluded before the passage of three months from the date of the last re-check. Once excluded, devices will need to re-register to become operational again.

Storage of data about protected licenses or sites: Data will be collected daily from the Commission's databases. AFC calculations for available frequencies and power levels will be made based on current protected license and site data.

In addition, the WBA is prepared to maintain, per the Commission's directive, geographically-specific and frequency-specific "deny" lists for as long as necessary to comply with the Commission's requirements.

6. ***A description of how the prospective AFC system operator will handle unanticipated situations that may disrupt performance of the system's required functions— ranging from exceptional cases that affect the system's ability to perform its required functions in isolated instances to cases involving the type of widespread disruption that an event like a system failure might cause.***

Response – Performance disruption can be loosely grouped into two sets of issues: disruptions that are within the AFC's control to prevent or manage and disruptions imposed on the AFC by an external event. The more one can prepare for the former, the more prepared one will be for the latter. At a high level, the goal is to find and eliminate vulnerabilities in the initial design of the AFC System, and as it is modified going forward. The use of open-source AFC software will facilitate more robust feedback from stakeholders than is possible with proprietary software, expediting the process of identifying vulnerabilities and addressing them before disruptions occur. The mix of techniques that are within an AFC's control and that lower the risk of a disruptive event are:

- Authentication – rigorously examining a device/proxy's qualifications to ensure that the AFC System only authenticates eligible devices. By way of example, a device with a geolocation outside of the United States should be disqualified from authenticating to the AFC System based upon the AFC System's initial review of the registration data provided. Further, a device with an FCC ID number that can't be confirmed through the FCC equipment authorization database must be disqualified. Data from a device not yet authenticated will not be exposed to the operational functions of the AFC System.
- Software maintenance - Software and firmware updates, bolstered by contributions from licensed open source contributors, and also including updates that WBA may originate, will be supported to address vulnerabilities that could lead to a disruptive event. Of particular importance is patching vulnerabilities, and in ensuring that updates to make the AFC System operate more smoothly do not introduce new vulnerabilities.
- Threat detection - Data will be flowing to the AFC System from FCC databases and from registered devices or proxies, providing vectors for disruptive threats. WBA will employ threat detection techniques to determine that AFC data and functions are operating as designed.
- Administrative credentials - shall be limited to personnel designated as AFC System administrators and shall not be available to WBA membership or WBA staff not assigned to AFC System. Credentials shall be managed according to industry best practices.
- Cloud architecture – WBA will use a secure cloud architecture to support resiliency for both AFC System computational capability and for data repositories. Vendor data centers will also be selected on their ability to maintain physical security barriers, intrusion detection, and access monitoring to prevent and identify intruders.
- Audit - WBA will audit its AFC System routinely to determine if it is continuing to operate to provide the expected results, and to provide a basis for corrective action as required.

Non-cyber-security events outside the WBA's control that might cause disruption include failure of one or more of the FCC's databases, an "Act of God" such as a weather event disrupting communications to registered devices due to power outages, or a catastrophic event impacting a vendor such as a cloud supplier. If an FCC database failure were to occur, WBA stands ready to follow the Commission's instructions. In the weather event case, a lack of electricity would either cause devices to immediately shut down, or if equipped with batteries, to power down as battery life is consumed (IT systems normally have less than 24 hours of battery power). As devices are restored, they would re-initiate daily re-check. A provider failure (e.g., loss of cloud-based computational capability, loss of ability to download, process and update protected licensee/site data) impacting the core capabilities of the AFC System requires the AFC System to report no channel availability in the 6 GHz range and/or not provide frequencies/power levels when requested

by the devices/proxies. WBA would work with the vendor pursuant to its contractual arrangements to restore service.

7. ***A description of the methods (e.g., interfaces, protocols) that will be used for secure communication between the AFC system and its associated standard-power devices and to ensure that unauthorized parties cannot access or alter the database or the list of available frequencies and power levels sent to the standard-power devices.***

Response – WBA's track record includes several of the world's first wireless technology deployments, requiring best-of-breed security protocols for exchanging critical user, service, and financial data amongst the stakeholders involved. To deliver the ever-evolving range of services on Wi-Fi networks, WBA is championing the mass utilization of seamless, secure, and highly reliable roaming frameworks that connect citizens, enterprises, residences, and cities in unprecedented ways. WBA intends to implement and use the Wi-Fi Alliance's "AFC System to AFC Device Interface Specification."[13]

Relevant Experience

WBA has deployed systems in conjunction with its large membership of operators and technology companies, successfully addressing significant requirements in terms of service availability, latency, security, meeting the security needs of broader industry verticals and regulatory frameworks globally. WBA AFC system will be built on the same technology that underpins WBA's OpenRoaming federation framework, leveraging a highly scalable schema of distributed end points ("Devices": Access Points, Wireless LAN Controllers, Cloud servers, AAA servers) connected and authenticated to a centralized authority. WBA AFC system will follow the concept of the currently deployed Public Keying Infrastructure (PKI) developed under a standardized policy. This policy is subject to independent and recurring audits, to facilitate flawless ecosystem operation and agile reporting.

Global security standards

The nature of the Wi-Fi ecosystem - with hundreds of thousands of networks with bilateral or multilateral relationships - requires that communications are secured via automated mechanisms.

[13] https://www.wi-fi.org/file/afc-specification-and-test-plans

The system currently under development will include TLS-RadSec tunnels and the use of X.509 digital certificates. Further, these mechanisms are standardized on IETF RFC 6614, RFC 5280.

System <> Device security

The System-Device exchanges will use the TLS standard that provides security features to detect attacks, such as preventing eavesdropping and tampering, which by nature would harm the regular operation and fault detection, damaging industry stakeholders' operations. The cryptographic nature of the communication also prevents any 3rd party to attempt "man in the middle" attacks and decrypt the information, affecting the stability and resilience of the AFC system.

Database security

Data repositories will be secured internally with encryption techniques and follow tiered access control policies, limited to the umbrella ecosystem policy authority (composed of senior WBA staff members). Any review cycles pertaining to updating or altering the AFC System's database follow industry benchmark project management technical procedures. Collaborative environments and consensus-building mechanisms will be applied for governing these changes, guaranteeing no individual or company is able to make changes without cooperating with the policy authority.

Compliance audit and other assessment

All aspects of the AFC System operation shall be subject to compliance audit for AFC Operators or equivalent. Further there should be "Security and Practices Review," which consists of a review of an AFC System operator secure facility, security documentation, and any other appropriate material to ensure that it performs accordingly.

A compliance auditor either shall be a private firm that is independent from any of the entities involved on the ecosystem, or it shall be sufficiently organizationally separated from those entities to provide an unbiased, independent evaluation.

8. ***If the prospective AFC system operator will not be performing all AFC functions, information on (1) the entities that will be responsible for operating other functions of the AFC system; and (2) how the Commission can ensure that all of the requirements for AFC systems in the rules are satisfied when AFC functions are divided among multiple entities.***

Response – WBA expects to perform all AFC System functions.

9. ***A description of how the prospective AFC system operator will provide access to their AFC system for a public trial period which will include thorough testing.***

Response – The WBA AFC system implementing Open AFC will be made available during the public trial period. The scope and range of the testing being development will offer a commercially reasonable emulation of a production scenario.

For this purpose, WBA plans to establish a web portal and allow interested persons to register to trial the system. The system implements the Wi-Fi Alliance AFC System to AFC Device Interface Specification and will be made available for accessing to the system. Any users interested in testing the WBA AFC system should contact the WBA to retrieve more information. In exchange, we will ask, but not require, those using the system in test mode to provide feedback about the tool.

10. ***An affirmation that the prospective AFC system operator, and any entities responsible for operating other functions of the AFC system under the control of the AFC system operator, will comply with all of the applicable rules as well as applicable enforcement mechanisms and procedures.***

Response – WBA affirms that it will comply with all the applicable rules as well as applicable enforcement mechanisms and procedures, pertaining to AFC system operation.